

AMENDMENT TO THE CLAIMS

1. (Currently Amended) A system for multimedia on demand, the system comprising:

a plurality of buses comprising a media bus, a network bus, and a system data bus;

a plurality of tuners and demodulators connected to the system data bus and connected to an analog-to-digital converter, the plurality of tuners and demodulators sending an analog information signal to the analog-to-digital converter, and the analog-to-digital converter outputting digital information signal based at least in part on the analog information signal;

the plurality of tuners and demodulators also connected to a decryption circuit that decrypts an encrypted information signal received from the plurality of tuners and demodulators and produces a decrypted information signal;

a decoder circuit connected to the decryption circuit that converts the decrypted information signal from one format to a second format;

a cipher/decipher circuit connected to the decoder circuit and connected to the analog-to-digital converter that deciphers the digital information from the analog-to-digital converter and deciphers the converted decrypted information signal from the decoder circuit;

the cipher/decipher circuit connected to the media bus and sending deciphered information signals to the media bus;

the system data bus connected to the media bus and configured to only receive the deciphered information signals from the media bus, the system data bus unable to send information to the media bus;

a video overlay processor connected between the system data bus and the media bus, the video overlay ~~overly~~ processor receiving the deciphered information signals from the media bus and sending video overlay signals to the system data bus;

the network bus connected to the system data bus and receiving system data bus information and the video overlay ~~overly~~ signals communicated along the system data bus;

a mass storage device connected to the system data bus and storing the system data bus information and the video overlay ~~overly~~ signals;

a data switch connected to the network bus, the data switch receiving the system data bus information and the video overlay ~~overly~~ signals and sending the system data bus information and the video overlay ~~overly~~ signals to one or more switch ports;

a processor connected to the system data bus; and
memory coupled to the system data bus,

~~wherein the deciphered information signals communicate from the media bus, to the system data bus, and to the network bus for routing by the data switch,~~

~~wherein the video overly signals communicate from the video overlay processor, to the system data bus, and to the network bus for routing by the data switch, and~~

~~wherein data switch information from the data switch communicates from the network bus to the system data bus, but the data switch information is prevented from communicating to the media bus~~

wherein a browser-based graphical user interface is stored in the memory, the processor automatically downloads and stores content items to the memory, the processor receives an instruction to retrieve the graphical user interface from the memory, and the processor sends the graphical user interface to a client device with the graphical user interface describing the content items stored in the memory.

2. (Cancel)

3. (Cancel)

4. (Currently Amended) The system of claim 1, wherein the processor receives a command from the client device that was transmitted from a remote control ~~further comprising a storage position identifier for each multimedia content item stored in the memory, the storage position identifier specifying a logical storage position for the multimedia content item, the storage position identifier received from a service provider and updated by the service provider.~~
5. (Currently Amended) The system of claim 1, wherein the processor retrieves another instruction from the memory that is associated with the command from the remote control ~~further comprising a web server coupled to the system data bus, the web server providing access to content stored in the mass storage device.~~
6. (Currently Amended) The system of claim 1, wherein the processor includes instructions in the graphical user interface that control the system from the client device ~~further comprising a graphical user interface stored in the memory that provides access to content stored in the mass storage device.~~
7. (Currently Amended) The system of claim 1, further comprising a data table stored in the memory that associates a content identifier to a usage indicator for each content item, the content identifier identifying each content item automatically downloaded to the memory, and the usage indicator indicating that a content item has been played ~~graphical user interface stored in the memory that provides access to information available from the data switch.~~
8. (Cancel)
9. (Cancel)
10. (Cancel)

11. (Cancel)
12. (Cancel)
13. (Cancel)
14. (Cancel)
15. (Cancel)
16. (Cancel)
17. (Currently Amended) A computer readable medium storing processor executable instructions for performing a method of providing ~~system~~ for multimedia on demand, the ~~method system~~ comprising:

connecting a plurality of tuners and demodulators to a system data bus and to an analog-to-digital converter, the plurality of tuners and demodulators sending an analog information signal to the analog-to-digital converter, and the analog-to-digital converter outputting digital information signal based at least in part on the analog information signal;

connecting the plurality of tuners and demodulators to a decryption circuit that decrypts an encrypted information signal received from the plurality of tuners and demodulators and produces a decrypted information signal;

connecting a decoder circuit to the decryption circuit that converts the decrypted information signal from one format to a second format;

connecting a cipher/decipher circuit to the decoder circuit and to the analog-to-digital converter that decipheres the digital information from the analog-to-digital converter and decipheres the converted decrypted information signal from the decoder circuit;

connecting the cipher/decipher circuit to the media bus and sending deciphered information signals to the media bus;

connecting the system data bus to the media bus and configuring the system data bus to only receive the deciphered information signals from the media bus, the system data bus unable to send information to the media bus;

connecting a video overlay processor between the system data bus and the media bus, the video overlay processor receiving the deciphered information signals from the media bus and sending video overlay signals to the system data bus;

connecting the network bus to the system data bus and receiving system data bus information and the video overlay signals communicated along the system data bus;

connecting a mass storage device to the system data bus and storing the system data bus information and the video overlay signals;

connecting a data switch to the network bus, the data switch receiving the system data bus information and the video overlay signals and sending the system data bus information and the video overlay signals to one or more switch ports;

connecting a processor connected to the system data bus; and

connecting memory to the system data bus,

processing an instruction to automatically receive a first multimedia content item at a transmission rate that is less than a real time transmission rate in bytes per second;

storing the first multimedia content item;

modifying a data table to include a first multimedia content item identifier, the first multimedia content item identifier corresponding to the first multimedia content item;

sending a multimedia usage report, the multimedia usage report based at least in part on the data table;

storing a browser-based graphical user interface in the memory;

automatically downloading and storing content items to the memory;

receiving an instruction to retrieve the graphical user interface from the memory;

and

sending the graphical user interface to a client device with the graphical user interface describing the content items stored in the memory,

wherein the deciphered information signals communicate from the media bus, to the system data bus, and to the network bus for routing by the data switch,

wherein the video overlay signals communicate from the video overlay processor, to the system data bus, and to the network bus for routing by the data switch, and

wherein data switch information from the data switch communicates from the network bus to the system data bus, but the data switch information is prevented from communicating to the media bus

~~a plurality of buses comprising a media bus, a network bus, and a system data bus;~~

~~a plurality of tuners and demodulators connected to the system data bus and connected to an analog-to-digital converter, the plurality of tuners and demodulators sending an analog information signal to the analog-to-digital converter, and the analog-to-digital converter outputting digital information signal based at least in part on the analog information signal;~~

~~the plurality of tuners and demodulators also connected to a decryption circuit that decrypts an encrypted information signal received from the plurality of tuners and demodulators and produces a decrypted information signal;~~

~~a decoder circuit connected to the decryption circuit that converts the decrypted information signal from one format to a second format;~~

~~a cipher/decipher circuit connected to the decoder circuit and connected to the analog-to-digital converter that decipheres the digital information from the analog-to-digital converter and decipheres the converted decrypted information signal from the decoder circuit;~~

~~the cipher/decipher circuit connected to the media bus and sending deciphered information signals to the media bus;~~

~~the system data bus connected to the media bus and configured to only receive the deciphered information signals from the media bus, the system data bus unable to send information to the media bus;~~

~~a video overlay processor connected between the system data bus and the media bus, the video overlay processor receiving the deciphered information signals from the media bus and sending video overlay signals to the system data bus;~~

~~the network bus connected to the system data bus and receiving system data bus information and the video overlay signals communicated along the system data bus;~~

~~a mass storage device connected to the system data bus and storing the system data bus information and the video overlay signals;~~

~~a data switch connected to the network bus, the data switch receiving the system data bus information and the video overlay signals and sending the system data bus information and the video overlay signals to one or more switch ports;~~

~~a processor connected to the system data bus; and~~

~~memory connected to the system data bus, the memory storing a multimedia on-demand data table and multimedia on-demand instructions;~~

~~the multimedia on-demand data table including a plurality of multimedia content usage records, each multimedia content usage record adapted to include a multimedia content usage indicator field to store a multimedia content usage indicator, the multimedia content usage indicator associated with a multimedia content item stored on the mass storage device, and~~

~~the multimedia on-demand instructions to be executed by the processor, the multimedia on-demand instructions including instructions to~~

~~automatically receive the plurality of multimedia content items at a transmission rate that is less than a real time transmission rate in bytes per second, and~~

~~send a multimedia on-demand usage message, the multimedia on-demand usage message to be based at least in part on the multimedia on-demand data table;~~

~~wherein the deciphered information signals communicate from the media bus, to the system data bus, and to the network bus for routing by the data switch,~~

~~wherein the video overlay signals communicate from the video overlay processor, to the system data bus, and to the network bus for routing by the data switch, and~~

~~wherein data switch information from the data switch communicates from the network bus to the system data bus, but the data switch information is prevented from communicating to the media bus.~~

18. (Currently Amended) The computer readable medium system of claim 17, further comprising instructions for receiving a command from the client device that was transmitted from a remote control ~~wherein each multimedia content usage record is adapted to include a multimedia content identifier field to store a multimedia content identifier, the multimedia content identifier to correspond to a multimedia content item of the plurality of multimedia content items stored on the mass storage device.~~
19. (Currently Amended) The computer readable medium ~~system~~ of claim 17, further comprising instructions for retrieving another instruction from the memory that is associated with the command from the remote control ~~wherein a multimedia content usage indicator is selected from the group consisting of a content played indicator, a content purchased indicator, and a content unused indicator.~~
20. (Currently Amended) The computer readable medium system of claim 17, further comprising instructions in the graphical user interface that control a residential gateway from the client device ~~a storage position identifier for each multimedia content item, the storage position identifier specifying a logical storage position for the multimedia content item, the storage position identifier received from a service provider and updated by the service provider with each change in the multimedia on-demand data table.~~
21. (Cancel)
22. (Cancel)

23. (Currently Amended) The computer readable medium ~~system~~ of claim 17, further comprising instructions for storing a data table stored in the memory that associates a content identifier to a usage indicator for each content item, the content identifier identifying each content item automatically downloaded to the memory, and the usage indicator indicating that a content item has been played ~~wherein the multimedia on-demand instructions include instructions to:~~
- ~~receive a portion of a multimedia content item, the portion of the multimedia content item being less than the entirety of the multimedia content item, the portion of the multimedia content item being received at a transmission rate, the transmission rate being less than the playback rate in bytes per second; and~~
- ~~make a determination that continuous playback of the entirety of the multimedia content item can begin prior to receipt of the entirety of the multimedia content item.~~
24. (Currently Amended) The computer readable medium ~~system~~ of claim 23, further comprising instructions for storing a usage indicator for each content item that indicates when a content item has been played ~~wherein the determination is based at least in part on the transmission rate and the playback rate.~~
25. (Currently Amended) The computer readable medium ~~system~~ of claim 17, further comprising instructions for accessing a profile to determine the content items stored in the memory ~~wherein the multimedia on-demand instructions include instructions to receive the plurality of multimedia content items from a multimedia on-demand service provider, the multimedia on-demand service provider selected from the group consisting of a direct broadcast satellite television service provider, a cable television service provider, a terrestrial broadcast television service provider, a wireless broadband data service provider, and a wired broadband data service provider.~~
26. (Currently Amended) A method for providing multimedia-on-demand, the method comprising:

connecting a plurality of tuners and demodulators to a system data bus and to an analog-to-digital converter, the plurality of tuners and demodulators sending an analog information signal to the analog-to-digital converter, and the analog-to-digital converter outputting digital information signal based at least in part on the analog information signal;

connecting the plurality of tuners and demodulators to a decryption circuit that decrypts an encrypted information signal received from the plurality of tuners and demodulators and produces a decrypted information signal;

connecting a decoder circuit to the decryption circuit that converts the decrypted information signal from one format to a second format;

connecting a cipher/decipher circuit to the decoder circuit and to the analog-to-digital converter that decipheres the digital information from the analog-to-digital converter and decipheres the converted decrypted information signal from the decoder circuit;

connecting the cipher/decipher circuit to the media bus and sending deciphered information signals to the media bus;

connecting the system data bus to the media bus and configuring the system data bus to only receive the deciphered information signals from the media bus, the system data bus unable to send information to the media bus;

connecting a video overlay processor between the system data bus and the media bus, the video overlay ~~overly~~ processor receiving the deciphered information signals from the media bus and sending video overlay signals to the system data bus;

connecting the network bus to the system data bus and receiving system data bus information and the video overlay ~~overly~~ signals communicated along the system data bus;

connecting a mass storage device to the system data bus and storing the system data bus information and the video overlay ~~overly~~ signals;

connecting a data switch to the network bus, the data switch receiving the system data bus information and the video overlay ~~overly~~ signals and sending the system data bus information and the video overlay ~~overly~~ signals to one or more switch ports;

connecting a processor connected to the system data bus; and

connecting memory to the system data bus,
processing an instruction to automatically receive a first multimedia content item
at a transmission rate that is less than a real time transmission rate in bytes per second;
storing the first multimedia content item;
modifying a data table to include a first multimedia content item identifier, the
first multimedia content item identifier corresponding to the first multimedia content
item; ~~and~~
sending a multimedia usage report, the multimedia usage report based at least in
part on the data table;
storing a browser-based graphical user interface in the memory;
automatically downloading and storing content items to the memory;
receiving an instruction to retrieve the graphical user interface from the memory;
and
sending the graphical user interface to a client device with the graphical user
interface describing the content items stored in the memory,

wherein the deciphered information signals communicate from the media bus, to
the system data bus, and to the network bus for routing by the data switch,
wherein the video overly signals communicate from the video overlay processor,
to the system data bus, and to the network bus for routing by the data switch, and
wherein data switch information from the data switch communicates from the
network bus to the system data bus, but the data switch information is prevented from
communicating to the media bus.

27. (Currently Amended) The method of claim 26, further comprising:

receiving a command from the client device that was transmitted from a remote
control;
retrieving another instruction from the memory of the residential gateway that is
associated with the command from the remote control

~~receiving a multimedia content item usage instruction related to the first multimedia content item;~~

~~directing usage of the first multimedia content item based at least in part on the multimedia content item usage instruction; and~~

~~updating the data table based at least in part on the multimedia content item usage instruction.~~

28. (Currently Amended) The method of claim 27 26, further comprising including instructions in the graphical user interface that control a residential gateway from the client device wherein the multimedia content item usage instruction is selected from the group consisting of an instruction to playback the multimedia content item as part of a multimedia content item viewing transaction, an instruction to export the multimedia content item as part of a multimedia content item purchase transaction, an instruction to store the multimedia content item as part of a multimedia content item deferred viewing transaction, and an instruction to allow use of the multimedia content item as part of a multimedia content item licensing transaction.
29. (Currently Amended) The method of claim 27 26, further comprising a data table stored in the memory that associates a content identifier to a usage indicator for each content item, the content identifier identifying each content item automatically downloaded to the memory, and the usage indicator indicating that a content item has been played wherein updating the data table based at least in part on the multimedia content item usage instruction includes storing a first multimedia content item usage indicator, the first multimedia content item usage indicator associated with the first multimedia content identifier.

30. (Currently Amended) The method of claim ~~29~~ 26, further comprising storing a usage indicator for each content item that indicates when a content item has been played ~~wherein the multimedia usage report is based at least in part on the first multimedia content item usage indicator.~~
31. (Currently Amended) The method of claim 30, further comprising including the usage indicator in the graphical user interface for each content item stored in the memory ~~wherein the first multimedia content item usage indicator is selected from the group consisting of a content played indicator, a content purchased indicator, and a content licensed indicator.~~
32. (Currently Amended) The method of claim 26, further comprising [[:]] accessing a profile to determine the content items stored in the memory
~~automatically receiving a second multimedia content item, the second multimedia content item to replace the first multimedia content item;~~
~~storing the second multimedia content item; and~~
~~updating the data table to include a second multimedia content item identifier, the second multimedia content item identifier corresponding to the second multimedia content item.~~
33. (Currently Amended) The method of claim ~~32~~ 26, further comprising authenticating access to the content items using a smart card reader ~~wherein storing the second multimedia content item includes deleting the first multimedia content item.~~
34. (Currently Amended) The method of claim 26, wherein sending the graphical user interface to the client device comprises sending the graphical user interface to a set top box ~~further comprising receiving a storage position identifier from a service provider for each multimedia content item, the storage position identifier specifying a logical storage position for the multimedia content item, the storage position identifier updated by the service provider with each change in the data table.~~

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51. (Cancel)

52. (Cancel)